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Naveen Bali

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EXAMINER

NGUYEN, DUSTIN

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/692,669	<b>Applicant(s)</b> BALI ET AL.	
	<b>Examiner</b> DUSTIN NGUYEN	<b>Art Unit</b> 2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-17,22 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-17,22 and 24-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-6, 9-17 and 22-26 are presented for examination.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/04/2008 has been entered.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 11-14, 16, 17, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar Malavalli et al. [ "Fibre Channel Generic Service-3 (FC-GS-3", NCITS working draft proposed American National Standard for Information Technology, January 13, 2000 ], in view of Betker [ US Patent No 7,362,717].

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5. As per claim 1, Malavalli discloses a method for establishing links between Fibre Channel (FC) node devices through a FC fabric, the method comprising:

assigning a common name to a pair of ports [ i.e. RSPN\_ID request shall be used to associated a symbolic port name with a given port identifier ] [ Section 5.1.4.32, pages 65 and 66 ], and the pair of ports includes a source port and a destination port [ i.e. port or address identifier ] [ Section 3.1.1, 4.5.1.4.3, 4.5.1.4.4, and 5.1.2.1 ];

storing the common name-to-port assignment within a name server for the FC fabric [ i.e. RFT\_ID name server request shall be used to record port identifier ] [ Section 5.1.4.31, pages 64 and 65 ];

configuring the first FC node device to query the name server to obtain an identity for the port located on the second FC node device based on the common name, and configuring the second FC node device to query the name server to obtain an identity for the port located on the first FC node device based on the common name [ i.e. GID\_ID request query to get port identifier ] [ Section 5.1.4.13, page 48 ].

Malavalli does not specifically disclose

wherein each port in the pair of ports is located on first and second FC node devices, respectively, and configuring the first FC node device to create a link between the pair of ports using the identity for the second FC node device, and configuring the second FC node device to create a link between the pair of ports using the identity for the first FC node device.

Betker discloses

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wherein each port in the pair of ports is located on first and second FC node devices, respectively [ i.e. nodes ] [ Figure 1; and col 5, lines 4-15 ], and configuring the first FC node device to create a link between the pair of ports using the identity for the second FC node device, and configuring the second FC node device to create a link between the pair of ports using the identity for the first FC node device [ i.e. establish link or path ] [ col 1, lines 28-33, and lines 39-44; and col 5, lines 15-20 ].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Malavalli and Betker because the teaching of Betker on establishing link between nodes would enable devices to properly communicate with each other and prevent information lost.

6. As per claim 2, Malavalli discloses wherein assigning the common name comprises automatically deriving the common name based on attributes of the pair of ports [ i.e. attributes in request commands ] [ Section 6.1.1.2, pages 78-80 ].

7. As per claim 3, Malavalli discloses wherein automatically deriving the common name comprises detecting a port type [ Section 6.1.1.2, pages 78-80 ]. Malavalli does not specifically disclose a slot number, and a sub-slot number for the pair of ports; and combining the port type, the slot number and the sub-slot number for the common name. Betker discloses a slot number, and a sub-slot number for the pair of ports; and combining the port type, the slot number and the sub-slot number for the common name [ i.e. fibre channel frames addressed to a switch module are identified by special address including the module's slot number ] [ Figures 2 and 3; and col

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5, lines 45-60 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Malavalli and Betker because the teaching of Betker would allow to interconnect fibre channel devices in an efficient and consistent manner.

8. As per claim 4, Malavalli discloses storing the common name within at least a portion of a symbolic name for each port, as defined in the FC protocol [ i.e. register symbolic port name ] [ Table 12, code 0218; and Section 5.1.2.8, and 5.1.4.7 ].

9. As per claim 5, Malavalli discloses configuring each port to register the common name as a symbolic name with the name server [ i.e. register symbolic port name ] [ Table 12, code 0218; and Section 5.1.2.8, and 5.1.4.7 ].

10. As per claim 6, it is rejected for similar reasons as stated above in claims 1, 3 and 5. Furthermore, Malavalli discloses configuring each FC port to login to the another FC port using the FC identifier [ Sections 4.5.1.1 and 10.7.1 ].

11. As per claim 11, it is rejected for similar reasons as stated above in claim 1, 4 and 5.

12. As per claim 12, it is rejected for similar reasons as stated above in claim 2.

13. As per claim 13, it is rejected for similar reasons as stated above in claim 3.

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14. As per claim 14, it is rejected for similar reasons as stated above in claim 11.

Furthermore, Malavalli discloses FC fabric that support an upper-level protocol (ULP) supported by the first FC port [ Introduction, page ix ], and comparing each of the symbolic names obtained from the name server with a symbolic name for the first FC port to find a match [ i.e. the name server shall, when it receives a GSPN\_ID request, return the registered symbolic port name for the specified port identifier ] [ Section 5.1.4.7 ]; and performing a port login using a port identifier of the second FC port whose symbolic name has the match with the symbolic name for the first FC port [ Sections 4.5.1.1 and 10.7.1 ].

15. As per claim 16, it is rejected for similar reasons as stated above in claim 14.

16. As per claim 17, it is rejected for similar reasons as stated above in claim 2.

17. As per claim 22, it is rejected for similar reasons as stated above in claims 1, 3-5.

18. As per claim 24, it is rejected for similar reasons as stated above in claims 4 and 5.

19. Claims 9, 10, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar Malavalli et al. [ “Fibre Channel Generic Service-3 (FC-GS-3”, NCITS working draft proposed American National Standard for Information Technology, January 13, 2000 ], in view

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of Betker [ US Patent No 7,362,717], and further in view of Zhu et al. [ US Patent No 6,353,612 ].

20. As per claim 9, Malavalli and Betker do not specifically disclose wherein the plurality of attributes are automatically detected by an operating system for the FC node device. Zhu discloses wherein the plurality of attributes are automatically detected by an operating system for the FC node device [ i.e. detecting port ] [ col 2, lines 25-39; and col 6, lines 24-33 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Malavalli, Betker and Zhu because the teaching of Zhu on automatically detecting port would enable to concurrently register multiple end-devices with the fabric without requiring the source end-device to possess the requisite functionality for initiating the login and registration with the fabric [ Zhu, col 2, lines 6-11 ].

21. As per claim 10, Malavalli discloses wherein assigning the symbolic name comprises storing the symbolic name at a predefined location within a symbolic name field for each port, as defined in the FC protocol [ Section 5.1.2.8 and 5.1.4.1 ].

22. As per claims 25 and 26, they are rejected for similar reasons as stated above in claims 9 and 10.



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23. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar Malavalli et al. [ “Fibre Channel Generic Service-3 (FC-GS-3”, NCITS working draft proposed American National Standard for Information Technology, January 13, 2000 ], in view of Betker [ US Patent No 7,362,717], and further in view of Woodring [ US Patent Application No 2002/0191649 ].

24. As per claim 15, Malavalli and Betker do not specifically disclose wherein the upper-level protocol is the Fibre Channel Virtual Interface (FCVI) protocol. Woodring discloses wherein the upper-level protocol is the Fibre Channel Virtual Interface (FCVI) protocol [ paragraphs 0143 and 0144 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Malavalli, Betker and Woodring because the teaching of Woodring would provide a mapping between FC and VIA to enable scalable clustering solutions [ Woodring, paragraph 0144 ].

25. Applicant's arguments with respect to claims 1-6, 9-17 and 22, 24-26 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dustin Nguyen/  
Primary Examiner, Art Unit 2454